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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/685,193	10/10/2000	Mark T. Stewart	P-9288.00	6010

7590 06/18/2002

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EXAMINER

JUNG, WILLIAM C

ART UNIT	PAPER NUMBER
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3737

DATE MAILED: 06/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/685,193

Applicant(s)

STEWART ET AL. *d*

Examiner

William Jung

Art Unit

3737

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10th October 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1, 13, 20-27, 29, 30, and 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 13, 20-27, 29, 30, and 34, the radius of the knuckle bend and or a bend angle are claimed in range with language about, which is indefinite to particularly point out and distinctly claim the subject matter.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Ideker et al* (US 5,222,501) in view of *Solomon et al* (US 5,853,368) and *Crowley et al* (US 6,004,269).

Ideker substantially discloses of all claimed inventions in claims 1-38. Ideker discloses of an ultrasound system where the transducer is designed to deliver tissue ablation procedure to the cardiac tissues and monitor the procedure through ultrasound diagnostic (col. 2, line 40-49). The catheter is introduced to heart tissue adjoining AV node as shown in figure 6 and can be manipulated to treat and diagnose any regions of the cardiac tissues including mitral valve and

caval tricuspid (col. 4, line 45-58). Ideker discloses of a catheter apparatus in reference to figure 4, where the ultrasound transducer at the tip of distal end provides imaging apparatus and an electrode for tissue ablation. The distal end is bendable and or curvable wire section and is manipulated to adjust the curvature or bending of the catheter to desired form. The catheter is bendable or curvable in multiple locations and at any angles with respect to the central axis of the catheter to form any desired shape necessary to perform ablation and diagnostic procedures. The catheter is connected to a handle at the proximal end (col. 7, line 27-46). In figure 6, a sectional view of the catheter in the cardiac system where the tip of the catheter **51** is in contact with the heart wall **12**.

Solomon further discloses of catheter manipulator to bend the catheter to desired direction with the catheter consists of ultrasound transducer for imaging and an electrode for tissue ablation. The manipulation of the catheter is achieved by tensile (col. 2, line 38-65; col. 3, line 9-19; col. 5, line 34-43).

Crowley discloses of an ultrasound catheter designed for imaging and tissue ablation. The catheter is manipulated by tension wire (col. 9, line 56-67). The rigidity of the catheter is maintained by spiral wire coil as shown in figures 3 and 4 (col. 15, line 27-55). The diameter of the catheter tube is approximately 2 mm (col. 15, line 11-26).

In both Solomon and Crowley, the motivation of the catheter design was to improve diagnose and to treat cardiac tissue with ablation procedure similar to that of the Ideker mentioned above. Therefore, it would have been obvious to one having an ordinary skill in the art at the time invention was made to apply the teachings of Ideker to the teachings of Solomon and Crowley to achieve the claimed inventions.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William Jung whose telephone number is 703-605-4364. The examiner can normally be reached on Mon-Fri 8:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marvin Lateef can be reached on 703-305-3256. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-0758 for regular communications and 703-308-0758 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

William Jung
Examiner
Art Unit 3737

wcj
May 29, 2002


Francis J. Jaworski
Primary Examiner